AMENDMENTS TO THE CLAIMS

Applicant submits below a complete listing of the current claims, including marked-up claims with insertions indicated by underlining and deletions indicated by strikeouts and/or double bracketing. This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of the Claims

1. (Previously Presented) A directional distributed coupler comprising:

a first conductive line carrying a main signal to be transmitted by an antenna, the main signal being carried between two end terminals of the first conductive line;

a second conductive line coupled to the first conductive line, the second line comprising a first terminal and a second terminal between which flows a sampled signal, proportional to the main signal, the second conductive line being coupled to the first conductive line such that the first terminal provides a first signal that is a function of a magnitude of the main signal flowing in a first direction on the first conductive line, and the second terminal provides a second signal that is a function of a magnitude of the main signal flowing in a second direction on the first conductive line; and

a first capacitor having a first capacitor terminal connected to a first one of the two end terminals of the first conductive line and a second capacitor terminal connected to a second one of the two end terminals of the first conductive line, and a second capacitor having a third capacitor terminal connected to the first terminal of the second conductive line and a fourth capacitor terminal connected to the second terminal of the second conductive line.

2. (Previously presented) The coupler of claim 1, wherein the lines have a same length.

3. (Previously presented) The coupler of claim 1, wherein the capacitors have values that are substantially the same.

4. (Previously presented) The coupler of claim 1, wherein the lines are smaller than approximately $\lambda/4$ in length, wherein λ is a wavelength for which the coupler is intended to operate.

5. (Previously presented) The coupler of claim 1, wherein each conductive line comprises at least two parallel sections between its end terminals, the sections of the two lines being interleaved.

6. (Previously presented) The coupler of claim 5, wherein at least one capacitor electrode is formed in a same metallization level as the first conductive line.

7. (Previously presented) The coupler of claim 1, wherein the first capacitor has a value ranging between 0.1 and 10 pF, the central frequency of the coupler ranging between a few tens of MHz and a few tens of GHz.

8. (Currently amended) A distributed coupler, comprising:

a first conductive line that carries a signal between a first terminal and a second terminal of the first conductive line to deliver the signal to an antenna;

a first capacitor having a first capacitor terminal coupled to the first terminal of the first conductive line and a second capacitor terminal coupled to the second terminal of the first conductive line; [[and]]

a second conductive line comprising a third terminal and a fourth terminal, the second conductive line being coupled to the first conductive line such that the third terminal provides a first coupled signal that is a function of a magnitude of the signal flowing in a first direction on the first conductive line, and a fourth terminal that provides a second coupled signal that is a function of a magnitude of the signal flowing in a second direction on the first conductive line; and

a second capacitor coupled to the third terminal and the fourth terminal.

9. (Canceled)

10. (Previously presented) The distributed coupler of claim 8, wherein the second conductive line is coupled to a control circuit, the control circuit being coupled to an amplifier that supplies the signal to the first terminal.

11. (Previously presented) The distributed coupler of claim 8, wherein at least one capacitor electrode is formed in a same metallization level in which is formed the first conductive line.

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claim 8

12. (Previously presented) The distributed coupler of ~~claim 9~~, wherein the first capacitor and the second capacitor have values between 0.1 and 10 pF.

13. (Previously presented) The distributed coupler of claim 8, wherein the directional distributed coupler has a directivity of at least 28 dB.

14. (Previously presented) The distributed coupler of claim 8, wherein a central frequency of the directional distributed coupler is between a few tens of MHz and a few tens of GHz.

15. (Previously presented) The distributed coupler of claim 8, wherein the second terminal is connected to the antenna.

16. (Previously presented) A distributed coupler, comprising:

a first conductive line that carries a signal between a first terminal and a second terminal of the first conductive line to deliver the signal to an antenna;

a first capacitor connected to the first terminal and the second terminal; and

a second conductive line coupled to the first conductive line;

wherein the first conductive line is smaller than approximately $\lambda/4$ in length, wherein λ is a signal wavelength upon which the distributed coupler is designed to operate.

17. (Previously presented) The distributed coupler of claim 16, wherein the second conductive line has a third terminal and a fourth terminal, and further comprising:

a second capacitor connected to the third terminal and the fourth terminal.

18. (Previously presented) The distributed coupler of claim 16, further comprising:

a control circuit connected to an amplifier that supplies the signal to the first terminal.

19. (Previously presented) The distributed coupler of claim 18, wherein the control circuit is configured to turn off the amplifier when a voltage of the second conductive line exceeds a threshold.

20. (Previously presented) The distributed coupler of claim 8, wherein the first conductive line is smaller than approximately $\lambda/4$ in length, wherein λ is a signal wavelength upon which the distributed coupler is designed to operate.

21. (Previously presented) The distributed coupler of claim 16, wherein the signal wavelength λ corresponds to a signal frequency that is approximately at a center of a frequency passband of the distributed coupler.

22. (Currently Amended) A distributed coupler, comprising:

a first conductive line that carries a signal between two terminals of the first conductive line to deliver the signal to an antenna;

a second conductive line having two terminals comprising a third terminal and a fourth terminal, the second conductive line being coupled to the first conductive line such that the third terminal provides a first coupled signal that is a function of a magnitude of the signal flowing in a first direction on the first conductive line, and a fourth terminal that provides a second coupled signal that is a function of a magnitude of the signal flowing in a second direction on the first conductive line; [[and]]

a first capacitor coupled, via different terminals of the first capacitor, respectively, to the two terminals of the first conductive line or the two terminals of the second conductive line; and

a second capacitor coupled, via different terminals of the second capacitor, respectively, to the two terminals of the first conductive line or the second conductive line, wherein the second

capacitor is coupled to a different one of the first and second conductive lines than the conductive line to which the first capacitor is coupled.

23. (Canceled)

24. (Currently Amended) The distributed coupler of claim 22 [[24]], wherein at least one of the first and second lines has a length smaller than $\lambda/4$ in length, wherein λ is a signal wavelength upon which the distributed coupler is designed to operate.

25. (Previously presented) The distributed coupler of claim 24, wherein the signal wavelength λ corresponds to a signal frequency that is approximately at a center of a frequency passband of the distributed coupler.